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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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CHICAGO, IL 60690				
EXAMINER				
KEE, FANNIE C				
ART UNIT		PAPER NUMBER		
3679				
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/566,284

Applicant(s)

KIM, SU GEN

Examiner

Fannie Kee

Art Unit

3679

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 March 2006.
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1, 4-9 and 12 is/are rejected.
7) ☒ Claim(s) 2, 3, 10 and 11 is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on 02 March 2006 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB-08)
Paper No(s)/Mail Date _____
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____

DETAILED ACTION

Drawings

1. The drawings are objected to because in Figures 4 and 5, separated elements within the same figure should either be connected by dotted lines or by brackets to designate all of the elements as one complete figure. Otherwise, each separate element should have a separate figure number designation.
2. The drawings are also objected to because the cross-hatching pattern is incorrect for the following reference elements – “20” – Figures 1, 2, 6-8, and 10; “11” – Figures 6-8 and 10; “50” – Figures 6-8 and 10; and, “60” – Figure 10.
3. Figures 11-13 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g).
4. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: “31” (paragraphs 41 and 43).
5. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing

should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either “Replacement Sheet” or “New Sheet” pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

6. The abstract of the disclosure is objected to because of the use of legal phraseology, i.e., “is disclosed” in line 1.

Correction is required. See MPEP § 608.01(b).

7. The disclosure is objected to because of the following informalities:
- Paragraph 4, line 16 – should the words “to reduce” actually be --which would reduce--?
 - Paragraph 33 – Missing description of Figure 11.
 - Paragraphs 41 and 43 – reference element “31” is not shown in the drawings.
 - Paragraph 41, line 10 – replace “packing 30” with --packing 20--.
 - Paragraph 44, lines 9-10 - replace “clamps 34” with --clamps 30--.

- f. Paragraph 45, line 8 – delete the word “12” after the word “rings”.
- g. Paragraph 45, line 9 - replace “inner rings 12” with --inner rings 21--.

Correction is required.

Claim Objections

8. Claim 10 is objected to because of the following informalities: replace the word “while” with --when-- in line 5.

Correction is required.

Claim Rejections - 35 USC § 112

9. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

10. Claims 4, 7, 9, and 12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 4 recites “the pipe joint is selected from the group consisting of a valve, a reducer, a tee and an elbow”. Examiner would like to point out that there is an indefiniteness to this claim based on claim 1 from which claim 4 depends. Claim 1 recites “flanges mounted to ends of pipes to be coupled together or ends of both a pipe and a pipe joint to be coupled together”. Therefore, if the flanges are mounted to the ends of pipes to be coupled together and not to a pipe

and a pipe joint, claim 4 does not work. Examiner is interpreting that as long as any convenient pipe joint can be a valve, a reducer, a tee and an elbow, this claim limitation has been met.

Claim 7 recites the limitation "the ring-shaped support grooves" in line 3. There is insufficient antecedent basis for this limitation in the claim.

Claim 9 recites "the circumferential hollow comprises at least two hollows which are symmetrically formed in opposite sides of the packing". How can the circumferential hollow comprise at least two circumferential hollows? Does Applicant mean that the hollow is split into two hollows? Examiner is interpreting that as long as there is a circumferential hollow, then this claim limitation is met.

Claim 12 recites the limitation "the adjusting member" in line 5. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

11. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

12. Claims 1, 4-6, 8, and 9 are rejected under 35 U.S.C. 102(b) as being anticipated by Lew et al U.S. Patent No. 4,418,948.

With regard to claim 1, and as shown in Figure 6, Lew et al disclose a pipe joint device, comprising:

flanges (37, 38, 39, 40) mounted to ends of pipes to be coupled together or ends of both a pipe and a pipe joint to be coupled together, the flange having at least one ring groove (between 37 and 39 and 38 and 40) around an outer circumferential surface thereof;

a packing (43, 45, 47) mounted to the flanges and having inner rings (45, 47) around an inner circumferential surface thereof to closely engage with the ring grooves of the flanges; and

a clamp (41) having a packing seat to seat the packing therein, with a support sidewall (42) formed by a radial inward extension of each side of the clamp, the clamp being divided into a plurality of clamp parts so that the clamp parts are placed around the packing and are fastened together by a locking member (see Figure 2).

With regard to claim 4, Lew et al disclose a pipe joint capable of being selected from the group consisting of a valve, a reducer, a tee and an elbow.

With regard to claim 5, Lew et al disclose the flanges being mounted through a welding process.

Note, the method of forming the device is not germane to the issue of patentability of the device itself. Therefore, this limitation is given little patentable weight.

With regard to claim 6, and as shown in Figure 6, Lew et al disclose the flanges being stopped by the support sidewalls of the clamp so that the pipes or the pipe and the pipe joint are prevented from being removed from the clamp.

With regard to claim 8, and as shown in Figure 6, Lew et al the packing having at least one circumferential hollow therein (inside 47).

With regard to claim 9, and as shown in Figure 6, Lew et al the circumferential hollow comprising at least two hollows which are symmetrically formed in opposite sides of the packing.

Allowable Subject Matter

13. Claims 2, 3, 10, and 11 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

With regard to claim 2, the prior art of record does not teach or suggest that the packing comprises a main channel formed along a central line of an outer circumferential surface of the packing, and the clamp comprises a central rib formed on the packing seat to correspond to the main channel in combination with the pipe joint device of claim 1.

With regard to claim 10, the prior art of record does not teach or suggest an anti-friction member made of metal located on at least and covering a whole area or a part of the outer circumferential surface of the packing so as to reduce friction between the clamp parts and a deformed part of the packing while the clamp parts are fastened together around the packing in combination with the pipe joint device of claim 1.

With regard to claim 11 the prior art of record does not teach or suggest an adjusting member inserted into each of the support sidewalls of the clamp to compress the packing, placed between the support sidewalls of the clamp, in a direction of thickness of the packing in combination with the pipe joint device of claim 1.

14. Claims 7 and 12 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

With regard to claim 7, the prior art of record does not teach or suggest that each of the flanges is provided with a support groove around the outer circumferential surface thereof so that the support sidewalls of the clamp are seated in the ring-shaped support grooves of the flanges to prevent the pipes or the pipe and the pipe joint from being removed from the clamp in combination with the pipe joint device of claim 1.

With regard to claim 12, the prior art of record does not teach or suggest a metal ring placed between each side surface of the packing and an associated support sidewall of the clamp so as to evenly transmit compression force to each side surface of the packing when the adjusting member is tightened to compress the packing in combination with the pipe joint device of claim 1.

Conclusion

15. Dole '466, Dole '666, and Dole '420 are being cited to show other examples of pipe joint devices.

16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Fannie Kee whose telephone number is (571) 272-1820. The examiner can normally be reached on 8:30 am to 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel P. Stodola can be reached on (571) 272-7087. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Aaron M Dunwoody/
Primary Examiner, Art Unit 3679

/F. K./
Examiner, Art Unit 3679
September 15, 2008